PD-1

19” Rack Mount Power Center

User’s Guide

http:// www.datavideo-tek.com

Rev: 230506

Warnings and Precautions

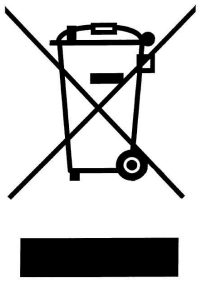
1. Read all of these warnings and save them for later reference.
2. Follow all warnings and instructions marked on this unit.
3. Unplug this unit from the wall outlet before cleaning. Do not use liquid or aerosol cleaners. Use a damp cloth for cleaning.
4. Do not use this unit in or near water.
5. Do not place this unit on an unstable cart, stand, or table. The unit may fall, causing serious damage.
6. Slots and openings on the cabinet top, back, and bottom are provided for ventilation. To ensure safe and reliable operation of this unit, and to protect it from overheating, do not block or cover these openings. Do not place this unit on a bed, sofa, rug, or similar surface, as the ventilation openings on the bottom of the cabinet will be blocked. This unit should never be placed near or over a heat register or radiator. This unit should not be placed in a built-in installation unless proper ventilation is provided.
7. This product should only be operated from the type of power source indicated on the marking label of the AC adapter. If you are not sure of the type of power available, consult your Datavideo dealer or your local power company.
8. Do not allow anything to rest on the power cord. Do not locate this unit where the power cord will be walked on, rolled over, or otherwise stressed.
9. If an extension cord must be used with this unit, make sure that the total of the ampere ratings on the products plugged into the extension cord do not exceed the extension cord's rating.
10. Make sure that the total amperes of all the units that are plugged into a single wall outlet do not exceed 15 amperes.
11. Never push objects of any kind into this unit through the cabinet ventilation slots, as they may touch dangerous voltage points or short out parts that could result in risk of fire or electric shock. Never spill liquid of any kind onto or into this unit.
12. Except as specifically explained elsewhere in this manual, do not attempt to service this product yourself. Opening or removing covers that are marked "Do Not Remove" may expose you to dangerous voltage points or other risks, and will void your warranty. Refer all service issues to qualified service personnel.
13. Unplug this product from the wall outlet and refer to qualified service personnel under the following conditions:
    a. When the power cord is damaged or frayed;
    b. When liquid has spilled into the unit;
    c. When the product has been exposed to rain or water;
    d. When the product does not operate normally under normal operating conditions. Adjust only those controls that are covered by the operating instructions in this manual; improper adjustment of other controls may result in damage to the unit and may often require extensive work by a qualified technician to restore the unit to normal operation;
    e. When the product has been dropped or the cabinet has been damaged;
    f. When the product exhibits a distinct change in performance, indicating a need for service.

Warranty

Datavideo warrants that the equipment it manufactures shall be free from defects in material and workmanship for a period of 12 months from the date of product purchased. If equipment fails due to such defects, Datavideo will, at its option, repair or provide a replacement for the defective part or product.

Equipment that fails after the warranty period, has been operated or installed in a manner other than that specified by Datavideo, or has been subjected to abuse or modification, will be repaired for time and material charges at the Buyer's expense. This warranty does not affect your statutory rights within the Country of purchase.

For EU Customers only - WEEE Marking.



This symbol on the product indicates that it will not be treated as household waste. It must be handed over to the applicable take-back scheme for the recycling of electrical and electronic equipment. For more detailed information about the recycling of this product, please contact your local Datavideo office.

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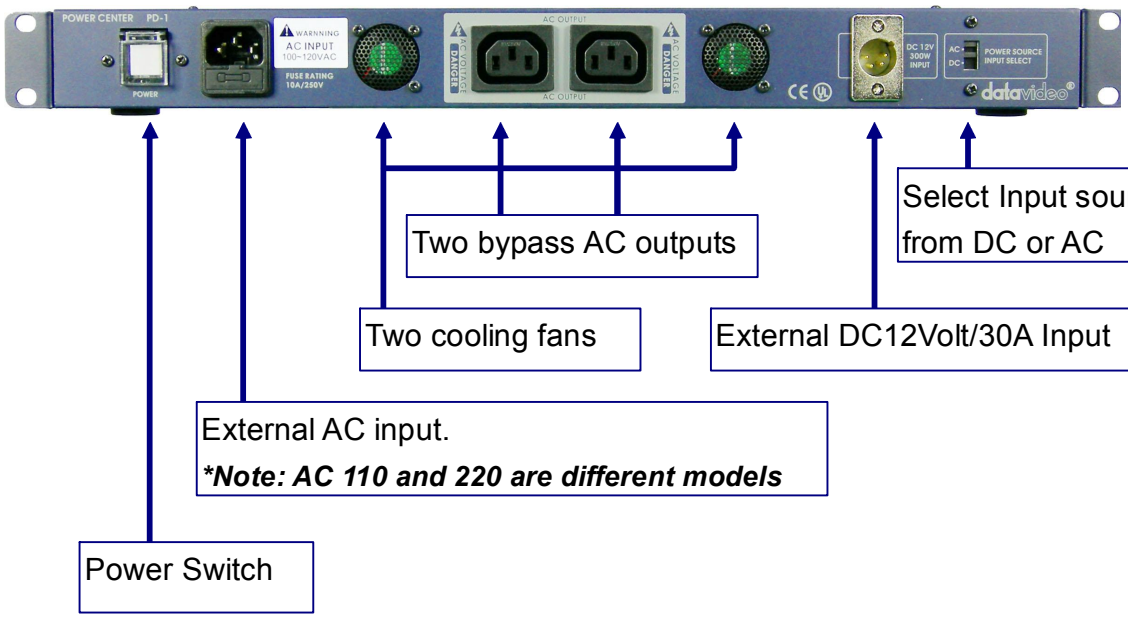
Introduction

The PD-1 is a 19” Rack Mount Power Centre. It is able to supply multiple 12V and 5V power outputs from an 110V/220V AC Input.
The PD-1 is an essential accessory for Datavideo Mobile Studio applications, together with the SE-800 switcher, LCD, recorders…the PD-1 makes the integration of a Mobile Studio become easier and more professional. Built-in time delay power on control to initiate each DC output terminal in sequence, and installed with an auto-recover fuse in every terminal to safely protect every working device.
Supports input power source from AC 110V or 220V (different models) or input from the DC-12V/30Amp input terminal.

What’s in the Package

1. PD-1 main unit
2. XLR 4P(male) to 4P(Female) 1.2m cable x 2
3. 2.1mm DC to DC Plug to 1.2m cable x 3
4. 2.1mm DC to DC Plug to 0.8m cable x 1
5. 2.1mm DC to DC Plug to 0.7m cable x 2
6. 2.1mm DC to DC Plug to 0.5m cable x 1
7. 2.1mm DC to DC Plug to 0.3m cable x 1
8. AC Power cord.
9. User’s Guide

Front Panel:


Select Input source from DC or AC
Two bypass AC outputs
Two cooling fans
External DC12Volt/30A Input
External AC input.
*Note: AC 110 and 220 are different models
Power Switch

On / Off Switch

Powers the PD-1 On / Off when using AC Power.

N.B. From DC Power the On / Off Switch is redundant

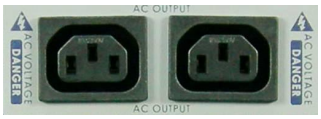
AC In with built-in fuse

AC Inlet for connecting to suitable mains power outlet – 100~120V or 220~240V according to model. The socket contains a fuse holder fitted with a 10A fuse.

N.B. Please ensure that you use the correct AC Voltage for the PD-1 that you have purchased, 110V and 220V are different models – If you are in any doubt please contact your supplier or your local Datavideo office listed at the back of this manual.

Cooling Fan

The PD-1 has two built-in cooling fans, please ensure that these are not blocked, and that some airflow is available.



AC Outlet 110V / 240V 5A

2 x AC Outlet at same voltage as AC Input (110~120 / 220~240V according to model)

N.B. Sockets are redundant when PD-1 is powered from DC

DC In

The PD-1 can be powered from a suitable 12V power source. When working from DC the PD-1 will not regulate the power outlets.

Please ensure that the 12V power source that you use is regulated. If you intend to run the PD-1 from a car or van power outlet make sure that a suitable regulator is used on the power feed.

Pin 4 should be wired positive and Pin 1 should be ground.

N.B. The AC Outlets are not active when the PD-1 is powered via the DC In.

N.B. The On / Off switch is redundant when the PD-1 is powered from a DC supply.

Input Select AC / DC

The Input select switch can be set to AC or DC according to the power input that you intend to use.

N.B. Do not connect AC and DC power inlets at the same time.

Rear Panel:

2.1m DC 5V/1A Output

2.1m DC 12V / 2A Output

2.1m DC 12V / 2A Output

2.1m DC12V Jack output
x 2 for total 4A max rating

Bypass AC Output

XLR DC12V / 5A Output

XLR DC12V + 2.1m
DV12V 7A Output

2.1m DC12V Jack output
x 2 for total 4A max rating

DC Out 5V 1A

5V 1A DC Output via 2.1mm In-Line Socket (Centre Positive)

DC Out 12V 2A

2 x 12V 2A DC Output via 2.1mm In-Line Sockets (Centre Positive)

DC Out 12V 4A

4 x 12V 4A DC Output via 2.1mm In-Line Sockets (Centre Positive)

DC Out 12V 7A

2 x 12V 7A DC Outputs. 1 x 2.1mm In-Line Sockets (Centre Positive), and 1 x 4 Pin XLR Socket (Pin 4 Positive, Pin 1 Ground)

DC Out 12V 5A

1 x 12V 5A Output via 4 Pin XLR Socket
(Pin 4 Positive, Pin 1 Ground)

AC Outlet 1.5A 110V / 3A 240V

AC Outlet at same voltage as AC Input (110~120 / 220~240V according to model)
N.B. Socket is redundant when PD-1 is powered from DC

Ground Terminal

When connecting this unit to any other component, make sure that it is properly grounded by connecting this terminal to an appropriate point. When connecting, use the socket and be sure to use wire with a cross-sectional area of at least 1.0 mm2.

Datavideo Product Voltage Requirements:

This table is a guideline for Datavideo Products, if you are using products from other manufacturers please check their voltage requirements carefully before connecting to the PD-1.

DC 5V 1A	**DAC-200, DAC-100**
DC 12V 2A	**BAC-03, VP-332, DAC-15, DAC-10, DAC-6, DAC-5, TLM-70D, TLM-404, TLM-700, TLM-702, TLM-350, SE-500, DVK-100, RMC-140, ITC-100, STC-100**
DC 12V 4A	**DN-100, CP-100, DAC-30**
DC 12V 5A	**MP-6000,**
DC 12V 7A	**SE-800, SE-800AV**

Specification:

ITEM		Specification
INPUT	VOLTAGE (AC)	110V, 220V – Separate models
	RANGE	100~120V AC / 220~240V AC
	FREQ.	50Hz, 60Hz
	POWER	110V/5A, 220V/4A – Separate models
	VOLTAGE (DC)	12V +/- 5%
	POWER	12V 300W
OUTPUT	VOLTAGE	+5V, +12V (depends on different loading increase voltage will some decreasing)
	RANGE	+5V +/-3% , +12V +/-3%
	CURRENT	+5V/1A, +12V/2A, 4A, 5A,7A
EFFICIENCY		>80%
INDICATOR		LED
NOISE RATIO		<1%
OVERLOAD PROTECTION		YES (AUTO-RECOVER FUSE)
WORKING TEMPERATURE		5 ~ 45°C
DIMENSION		440mm * 214mm * 44 mm (1U height 19” rack)
WEIGHT		3.8Kg

Service and Support

It is our goal to make your products ownership a satisfying experience. Our supporting staff is available to assist you in setting up and operating your system. Please refer to our web site www.datavideo-tek.com for answers to common questions, support requests or contact your local office below.

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